

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of	)	
	)	
Annual Assessment of the Status of Competition	)	MB Docket No. 03-172
in the Market for the Delivery of Video	)	
Programming	)	

### TENTH ANNUAL REPORT

**Adopted: January 5, 2004**

**Released: January 28, 2004**

By the Commission: Chairman Powell issuing a separate statement; Commissioners Copps and Adelstein concurring and issuing a joint statement

### TABLE OF CONTENTS

	<u>Paragraph</u>
I INTRODUCTION .....	1
A. Scope of this Report .....	2
B. Summary of Findings .....	4
1. Overview of the Past Decade: 1993-2003 .....	4
2. General Findings .....	6
II COMPETITORS IN THE MARKET FOR THE DELIVERY OF VIDEO PROGRAMMING .....	18
A. Cable Television Service .....	18
1. General Performance .....	20
2. Capital Acquisition and Disposition .....	35
3. Provision of Advanced Services .....	39
B. Direct-to-Home Satellite Services .....	61
1. Direct Broadcast Satellite .....	61
2. Home Satellite or Large Dish Service .....	73
3. Satellite-Based Advanced Services .....	75
C. Broadband Service Providers .....	78
D. Wireless Cable Systems .....	85
E. Private Cable Systems .....	89
F. Broadcast Television Service .....	93
G. Other Entrants .....	104
1. Internet Video .....	104
2. Home Video Sales and Rentals .....	108
H. Local Exchange Carriers .....	112
I. Electric and Gas Utilities .....	119

III	MARKET STRUCTURE AND CONDITIONS AFFECTING COMPETITION .....	123
A.	Horizontal Issues .....	123
1.	Competitive Issues in the Market for the Distribution of Video Programming....	124
2.	Competitive Issues in the Market for the Purchase of Video Programming.....	130
B.	Vertical Integration and Other Programming Issues .....	141
1.	Status of Vertical Integration .....	141
2.	Other Programming Issues.....	147
C	Technical Issues.....	177
1.	Cable Modems ..	178
2.	Navigation Devices.....	183
3.	Emerging Services .....	187
IV.	FOREIGN MARKETS.....	193
V.	ADMINISTRATIVE MATTERS.....	197
APPENDICES		
Appendix A List of Commenters		
Appendix B Horizontal Issues Tables		
Appendix C Vertical Integration Tables		

## I. INTRODUCTION

1. This is the Commission's tenth annual report ("2003 Report") to Congress on the status of competition in the market for the delivery of video programming.<sup>1</sup> Section 628(g) of the Communications Act of 1934, as amended ("Communications Act"), requires the Commission to report annually to Congress on the status of competition in the market for the delivery of video programming.<sup>2</sup> Congress imposed this annual reporting requirement in the Cable Television Consumer Protection and Competition Act of 1992 ("1992 Cable Act")<sup>3</sup> as a means of obtaining information on the competitive status of the market for the delivery of video programming.

### A. Scope of this Report

2 In previous years, we have focused only on the current state of competition and changes in the competitive environment since the prior year's Report. This year, however, represents a landmark, as we present the tenth report. Thus, in the 2003 Report, we have decided to take a broader view of the video marketplace, and to examine changes in the industry over the year since the last report, and in the

<sup>1</sup> The Commission's previous reports appear at *Implementation of Section 19 of the 1992 Cable Act (Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming)*, 1994 Report, 9 FCC Rcd 7442 (1994); 1995 Report, 11 FCC Rcd 2060 (1996), 1996 Report, 12 FCC Rcd 4358 (1997), 1997 Report, 13 FCC Rcd 1034 (1998); 1998 Report, 13 FCC Rcd 24284 (1998); 1999 Report, 15 FCC Rcd 978 (2000); 2000 Report, 16 FCC Rcd 6005 (2001); 2001 Report, 17 FCC Rcd 1244 (2002); and 2002 Report, 17 FCC Rcd 26901 (2002).

<sup>2</sup> Communications Act of 1934, as amended, § 628(g), 47 U.S.C. § 548(g).

<sup>3</sup> Pub. L. No. 102-385, 106 Stat. 1460 (1992).

period since the first report in 1994. We offer information and analysis regarding changes in the market since the *2002 Report*, over the last five years (i.e., since 1998), and in the decade since 1994. We report on trends in the market and on the factors that have facilitated or impeded changes in the competitive environment over these time periods. The information and analysis provided in this report are based on publicly available data, filings in various Commission proceedings, and information submitted by commenters in response to a *Notice of Inquiry* ("Notice") in this docket.<sup>4</sup> We do not require data submissions nor do we audit data provided. We report data and anecdotes as submitted by the commenters and note that we did not receive information on a number of issues raised in the *Notice* (e.g., data on the benchmarks specified in Section 612(g) of the Communications Act, also known as the 70/70 Rule, and information on non-English programming).

3. In Section II, we examine the cable television industry, existing multichannel video programming distributors ("MVPDs") and other program distribution technologies and potential competitors to cable television. Among the MVPD systems or techniques discussed are direct broadcast satellite ("DBS") services and home satellite dishes ("HSD" or "C-band"), broadband service providers ("BSPs"), wireless cable systems using frequencies in the multichannel multipoint distribution service ("MMDS"), private cable or satellite master antenna television ("SMATV") systems as well as broadcast television service. We also consider other existing and potential distribution technologies for video programming, including the Internet, home video sales and rentals, local exchange carriers ("LECs"), and electric and gas utilities. In Section III of this report, we examine market structure and competition. We evaluate horizontal concentration in the multichannel video marketplace and vertical integration between cable television systems and programming services. We also address technical issues, including cable modems, navigation devices, and emerging services.

## **B. Summary of Findings**

### **1. Overview of the Past Decade: 1993-2003**

4. The *2003 Report* examines the status of competition in the market for the delivery of video programming, over the past ten years and at various intervals in between. We discuss changes that have occurred in the competitive environment over the last year, the last five years and the last decade, explain these changes to the extent possible, and describe barriers to competition that existed at the time of our first *Report* and those that continue to exist. Competition provides consumers with choice, better services, higher quality, and greater technological innovation. Overall, due, in part, to Congressional efforts made over the past decade, technological advances and investment in new platforms for delivering video programming, the vast majority of Americans enjoy more choice, more programming and more services than any time in history.<sup>5</sup> In addition to an increase in the number of video channels, cable operators and other MVPDs also now offer advanced video services and many non-video advanced services. Cable television, however, remains the predominant technology for the delivery of video programming. Ten years ago, cable operators served almost 100% of the nation's subscribers. Today, cable's share has fallen to approximately 75% of all MVPD subscribers. Competitive alternatives to

---

<sup>4</sup> *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, 18 FCC Rcd 16042 (2003) ("Notice"). Appendix A provides a list of commenters and the abbreviations by which they are identified herein.

<sup>5</sup> We do not propose to make any determinations in this *Report* as to the amount of source or viewpoint diversity available.

incumbent cable operators have been available throughout this period to varying degrees and continue to develop, although not always as envisioned. For example, Congress and the Commission expected LEC video systems to become the primary competitors to cable systems. In 1992, the Commission established the video dialtone framework that permitted LEC entry into the video marketplace consistent with statutory prohibitions. Subsequently, Congress amended the Communications Act to permit LEC entry in their telephone service areas under one of four statutory frameworks, including the open video system ("OVS") framework.<sup>6</sup> Despite these efforts to foster competition, significant LEC entry into the video marketplace has failed to materialize.

5. On the other hand, DBS, which was first authorized by the Commission in 1988, and took until 1993 to begin offering MVPD services, has become the most significant national competitor to cable. Today, most consumers have the additional choice of at least two national DBS providers. As DBS equipment prices have declined and DBS offerings have become more comparable to cable service (including the provision of advanced video and non-video services), and pursuant to Congress's authorization of the retransmission of local broadcast signals, DBS subscribership has grown rapidly. DBS now serves the second largest share of MVPD subscribers. Today, other delivery technologies (*i.e.*, private cable systems, wireless cable systems, overbuilders) continue to serve small numbers of subscribers in limited areas with competitive alternatives to cable systems as they have over the last ten years. In 1998, for example, competing franchises had been awarded to broadband service providers with the potential to pass 7.2 million homes. In the five years since we began reporting on BSPs, competing franchises have grown, and today BSPs hold franchises that authorize them to serve over 17.7 million homes with state of the art facilities offering voice, video, and data. BSPs cite barriers to entry and, thus, their service is limited to a few markets, as noted in a recent GAO study.<sup>7</sup> Also, while some LECs (such as Ameritech) have exited the business, other LECs are still providing services (including those co-marketing with DBS providers), but are not expanding much beyond limited local areas.

## 2. General Findings

6. As was the case ten years ago, most MVPD subscribers continue to receive their video programming from a franchised cable operator, although cable's market share has declined steadily over this period. At year-end 1993, 94.89% of MVPD subscribers received their video programming from a franchised cable operator, and by June 2003, 74.87% of MVPD subscribers received their video programming from a franchised cable operator. The decline over the past ten years has been fairly steady with a 9.5 percentage point decrease in the first five years of our *Report* and an additional 10.5 percentage point decrease in the second five years since our *1994 Report*.

7. The total number of subscribers to both cable and non-cable MVPDs has increased significantly over the last ten years and continues to increase incrementally each year. A total of 60.3 million households subscribed to multichannel video programming services as of year-end 1993, where as of June 2003, 94.1 million households subscribed to MVPDs, an increase of more than 56% over the last ten years. Five years ago, 76.6 million households subscribed to MVPDs, an increase of more than 27% over 1993. This subscriber growth over the last five and ten years accompanied 14.2 and 21.26 percentage point increases respectively in MVPDs' penetration of television households to 85.25% as of

<sup>6</sup> Pub. L. No. 104-104, 110 Stat. 56 (1996).

<sup>7</sup> See U.S. General Accounting Office, *Issues Related to Competition and Subscriber Rates in the Cable Television Industry*, GAO-04-8 (Oct. 2003) at 10 ("2003 GAO Report").

June 2003.<sup>8</sup> MVPD penetration of television households was at its highest in June 2001, when 86.42% of television households subscribed to an MVPD.

8. Since our first *Report*, the number of cable subscribers continues to grow, reaching almost 65.9 million subscribers as of June 2003, up from the 57.2 million cable subscribers at year-end 1993, and up from the 65.4 million cable subscribers at June 1998. In the last several years, however, cable subscribership has declined such that as of June 2003, there were approximately the same number of cable subscribers as there were at year-end 1999. Over the last five years, subscribership has only grown by half a million subscribers. Despite recent declines in subscribership, cable subscriptions have increased 2.5% in the past year. The total number of non-cable MVPD subscribers grew from 3.1 million as of year-end 1993, to 11.23 million as of June 1998, to 23.7 million as of June 2003, a significant increase over 1993. DBS subscribership has grown significantly since its introduction ten years ago in 1993, and now represents 21.63% of all MVPD subscribers. Since its introduction, the DBS growth rate has exceeded the growth rate of cable by double digits in every year except in the past year, when DBS growth exceeded cable growth by 9.16 percentage points. Between June 2002 and June 2003, the number of DBS subscribers grew from about 18.2 million households to more than 20.4 million households. The most significant growth for DBS came between June 1997 and 1998, when DBS grew more than 42.6% over the prior year. The continued growth of DBS is still, in part, attributable to the authority granted to DBS operators to distribute local broadcast television stations in their local markets by the Satellite Home Viewer Improvement Act of 1999 ("SHVIA"), and an increase in the number of markets where such service is offered. Since its introduction, DBS has attracted former cable subscribers as well as consumers not previously subscribing to an MVPD.

9. Over the last year, the number of subscribers to MMDS and large dish satellite service (HSD) continued to decline, the participation of incumbent local exchange carriers in the distribution of video programming also continued to decline, and the number of subscribers to open video systems ("OVS") and private cable has remained relatively stable, although their market share remains small. We reported in our 1994 *Report* that as of year-end 1993, subscribers to HSD services were nearly 2.7% of all MVPD subscribers, and subscribers to MMDS services were almost one percent of all subscribers. At its peak at year-end 1995, subscribers to HSD services were nearly 3.5% of all MVPD subscribers, and at its peak at year-end 1996, subscribers to MMDS services were more than 1.6% of all MVPD subscribers. By June 2003, MMDS subscribers comprised only about 0.2% of all MVPD subscribers while HSD comprised only about 0.5% of all MVPD subscribers. Although subscribership to these services have been steadily declining over the last several years, the deployment and use of these services has contributed significantly to the early acceptance of non-wireline alternatives to traditional MVPD service, and has inspired current iterations of all-digital, wireless DBS services.

10. During the period under review, cable rates have risen significantly.<sup>9</sup> According to the Bureau of Labor Statistics, between year-end 1993 and the end of June 2003, the Consumer Price Index

---

<sup>8</sup> The number of MVPD households reported here, and the associated percentages, may overstate actual values because a household that subscribes to more than one MVPD (e.g., cable and DBS) is included as a subscriber to both services. See 2001 *Report*, 17 FCC Rcd at 1247 n.6.

<sup>9</sup> While the components of cable and satellite prices differ and direct comparisons cannot be made, it appears that the average price difference between cable and satellite television service has narrowed significantly over the past five years, with average monthly expenditures for satellite service falling below cable for the first time. A study by J.D. Power and Associates found that "average monthly expenditures for satellite television service is \$48.93 – up (continued....)"

("CPI"), which measures general price changes, increased approximately 25.5%, while cable prices, also measured as a subcategory of the CPI, rose approximately 53.1%. Between June 2002 and June 2003, the cable price component of the CPI rose 5.1% compared to a 2.1% increase in the overall CPI.<sup>10</sup> Concurrently with these rate increases, however, the number of video and non-video services offered increased, including a substantial increase in the number of video channels, increased use of cable (as measured by a substantial increase in cable viewership), and the addition of advanced service offerings, which, of course, are paid for separately by consumers. Cable operators attribute rising costs to increased programming costs and higher labor costs that have risen faster than inflation, as cable operators have increased the size and proficiency of their customer service workforce. GAO found that several additional factors are putting upward pressure on cable rates. The primary cost factors found by GAO are programming costs (which GAO observed, are partially recouped through the sale of advertising), and the costs associated with infrastructure investments. Increased spending by cable operators on customer service was also found to be a factor. GAO notes that industry representatives believe that certain factors related to the nature of ownership affiliations may also indirectly influence cable rates through their influence on cable operators' choice of which cable networks to carry. As suggested by GAO, some of the increase in cable prices is the result of costs to operators from system upgrades. Upgraded systems allow cable operators to provide improved video services (i.e., an increased number of channels on analog tiers, and advanced video services such as digital tiers, video on demand, and interactive television), and non-video advanced services such as telephony and high-speed Internet access, so the costs associated with upgrades are joint costs that support a variety of services.<sup>11</sup> NCTA has posited that high rates of growth in cable prices do not infer market power. In addition, NCTA believes that while overall cable rates have increased, price per viewing hour has actually declined over time and consumers are receiving more for their money than they were ten years ago.

11. We note that in certain locales, cable operators' pricing decisions may be affected by direct competition. Also, available evidence indicates that when an incumbent cable operator faces "effective competition," as defined by the Communications Act, it responds in a variety of ways, including

(Continued from previous page)

8% from 1998," but "cable spending has increased 41% in the same time period, moving from an average of \$35.15 per month in 1998 to \$49.62 per month in 2003."

<sup>10</sup> Using a different methodology and covering a different mix of cable services and a different time period, the Commission's annual survey of cable industry rates found that the monthly rate for basic service, the most highly subscribed cable programming service tier (often referred to as expanded basic or CPST), and equipment (consisting of an addressable analog set-top box and a remote control) rose by 8.2% between July 1, 2001, and July 1, 2002. *Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment*, 18 FCC Rcd 13284, 13296-98, Tables 9, 10, and 11 (2003) ("2002 Price Survey Report"). BLS bases the cable CPI on a survey of items on consumers' monthly cable bills, and includes such items as premium services (i.e., pay-per-channel) and installation costs, which are not included in the Price survey's methodology. Also, when an item shows a significant change in price, and there is a concomitant change in the nature of the product or service, BLS attempts to make a quality adjustment. BLS may increase or decrease the observed price of an item, depending on whether the change deteriorated or improved the quality of the particular product or service. In the case of cable service, the addition of channels is sometimes perceived as an improvement in quality, but not always, and thus sometimes lowers the reported percentage increase in the price index.

<sup>11</sup> Even though all of these advanced services are offered to and paid for separately by consumers, in many cases they are also offered as bundled services and as such, may provide some discount on basic or expanded basic service.

lowering prices or adding channels without changing the monthly rate, as well as improving customer service and adding new services such as interactive programming. For example, a recent GAO study found that where wire-based competition is available, cable rates are lower by about 15%. GAO further found that in markets where DBS companies provide local broadcast stations, rates are only slightly lower, but cable operators are more likely to improve the quality of their service in response to DBS competition.<sup>12</sup>

12 Cable television has, in fact, greatly evolved since the first report, providing more choice, greater flexibility, and more control. Ten years ago, cable television was an analog transmission, but as a result of the introduction of the all-digital DBS technology and its widespread acceptance by the public, cable television operators began replacing much of their original coaxial cable infrastructure with hybrid fiber and coaxial cable ("HFC") networks. This migration to digital transmission has not only enabled cable operators to transmit high-quality video signals to their customers and to offer such additional enhancements as HDTV, but it also has enabled cable operators to provide vastly more channels of video programming to consumers. Digital technology also has furthered the ability of cable operators to offer more service options, including advanced two-way services<sup>13</sup> such as high-speed Internet access, cable telephony, and video-on-demand. Many of these services enable consumers to maintain more control over what, when, and how they receive information.

13. We first noted in our *1997 Report* that several cable multiple system operators ("MSOs") were beginning to offer resale, and in some cases, facilities-based telephone service. The Commission anticipated that telephone service offered by cable operators would become a significant source of competition to incumbent LECs. The most promising indication of which was the merger of cable company TCI Communications and telephone company AT&T Corp. Today some cable MSOs are offering circuit switched telephony. Most cable MSOs, however, are waiting for IP technology to become widely available before accelerating their rollout of telephone service. Some of these cable operators are currently offering, or continuing to test, IP telephony products.

14. The most significant convergence of service offerings continues to be the pairing of Internet access services with video programming services. We first reported in our *1997 Report* that cable operators were beginning to offer a bundle of services to include high-speed access to the Internet via cable modem. By year-end 1998, there were approximately 500,000 subscribers.<sup>14</sup> Some cable operators offered access to the Internet through the subscriber's television and a specially designed set-top box, but the most popular way to access the Internet over cable was, and still is, through the use of a cable modem and personal computer. A very small number of users continue to access the Internet through television-based services. Today, virtually all of the major MSOs offer Internet access services via cable modems in large portions of their service areas and about one half of all mid-sized and small cable operators provide this service. As of June 2003, there were more than 13.8 million cable modem high-speed Internet access subscribers. Like cable, the DBS industry is continuing to develop ways to bring

---

<sup>12</sup> See 2003 GAO Report at 3-4. See also U.S. General Accounting Office, *Telecommunications The Effect of Competition From Satellite Providers on Cable Rates*, GAO/RCED-00-164 (July 2000).

<sup>13</sup> The advanced broadband services discussed here include cable telephony and Internet Protocol ("IP") telephony, Internet access through cable modems, digital video, video-on-demand ("VOD") and near-video-on-demand ("NVOD"), and interactive guides/interactive programming. 2000 Report, 16 FCC Rcd at 6015, n.11.

<sup>14</sup> Figures represent primarily residential subscribers, though may also include some small business. See fn. 135 *infra*

advanced services to their customers. For example, DirecTV currently offers one-way and two-way satellite-delivered Internet service under the brand name DirecWay. DirecTV has also entered into a strategic marketing alliance with BellSouth to explore the integration of digital satellite and DSL technology. In fact, 3 of the 4 major ILECs have partnered or are planning to partner with DBS providers. EchoStar, which had offered satellite-based Internet services through its investment in Starband, no longer provides a satellite-based broadband solution. Many MMDS and private cable operators also offer Internet access services. In addition, BSPs continue to build advanced systems specifically to offer a bundle of services, including video, voice, and high-speed Internet access.

15. Since our first *Report*, non-cable MVPDs have described regulatory and other barriers to entry that limit their ability to compete with incumbent cable operators. These non-cable MVPDs continue to report that many of the same barriers to entry noted in the 1994 *Report* are still experienced today. For example, in our 1994 *Report*, we noted that non-cable MVPDs experienced some difficulties in obtaining programming from vertically-integrated cable programmers and from unaffiliated programmers which make exclusive agreements with cable operators. In response to the *Notice*, many non-cable MVPDs report the same difficulties. Others described problems accessing vital sports and regional news programming as a result of exemptions to the program access rules, most notably, the terrestrial delivery of programming to distributors. In our 1998 *Report*, we noted that in multiple dwelling units ("MDUs") potential entry was discouraged or limited because an incumbent video programming distributor has a long-term and/or exclusive contract. This remains a concern for commenters today. In addition, as described in previous *Reports*, non-cable wireline MVPDs report problems obtaining franchises from local governments and difficulties in gaining access to utility poles needed to build out their systems. These concerns also remain.

16. More specific findings as to particular distribution technologies operating in the market for the delivery of video programming include the following:

- *Cable Systems:* Since the 1994 *Report*, subscribership to cable television services has increased steadily (between year end 1993 and June 2003, there was a 15.2% increase in subscribership from 57.2 million subscribers to 65.9 million subscribers). In recent years, some specific cable operators have experienced decreases in subscribership, but the industry on a whole has experienced average year-to-year increases of about 2% each year. The industry has also continued to grow in terms of revenue (an approximately 125% increase between year-end 1993 and year-end 2002), all-day audience shares for cable networks (which rose from an average 29 share during the 1993-1994 television season to an average 55 share during the 2002-2003 season), and expenditures on programming.
- Over the last decade, the cable industry has invested more than \$75 billion to upgrade and improve cable plant. As a result, digital compression technology has been implemented, resulting in significant increases in channel capacity over the last ten years, as well as the introduction of such non-video services such as Internet access and telephony.
- *Direct-to-Home ("DTH") Satellite Service (DBS and HSD):* Since 1994, video service has been available from high power DBS satellites that transmit signals to small DBS dish antennas installed at subscribers' premises (DBS service). Video service using low power satellites and larger antennas (HSD service) has been available since 1979. DBS currently has over 20 million subscribers, an increase of approximately 11.6% since the 2002 *Report*. There are currently a



little more than 500,000 subscribers to HSD services, as measured by the number of HSD users that actually purchase programming packages. This is down significantly from its peak subscribership of 2.4 million in 1995. DirecTV and EchoStar are each among the five largest providers of multichannel video programming service. In 1993, DBS was not available to consumers. As of June 2003, DBS represented a 21.6% share of the national MVPD market. Currently HSD represents another 0.53% of the MVPD market. At its peak, HSD represented almost 3.5% of MVPD service subscribers.

- *Broadband Service Providers:* In our *1994 Report*, we identified municipal and independent overbuilders. At that time, video distribution was the sole focus of overbuilding activity. In our *2001 Report* we addressed a new class of providers called BSPs, entities that compete with existing cable systems using state-of-the-art systems that offer a bundle of telecommunications services, including video, voice, and high-speed Internet access. As of June 2003, BSP served approximately 1.4 million subscribers, representing 1.49% of all MVPD households. RCN is the largest BSP, serving approximately 460,000 subscribers. WideOpenWest ("WOW") is the second largest BSP with cable systems serving about 290,000 subscribers. The third largest BSP is Knology, which currently serves approximately 130,000 subscribers.
- *Wireless Cable Systems:* Currently, the wireless cable industry ("MMDS") provides competition to the cable industry in limited areas. At year-end 1993, there were approximately 400,000 subscribers to MMDS service. At its peak in mid-1998, MMDS systems provided video service to approximately one million customers. MMDS subscribership declined over the last year from approximately 490,000 subscribers in June 2002 to 200,000 subscribers in June 2003. With the advent of digital MMDS and the Commission's authorization of two-way MMDS service, it appears that most MMDS spectrum eventually will be used to provide high-speed data services. Wireless cable represented an approximately 0.66% share of the MVPD market at year-end 1993, and approximately 0.21% share of the national MVPD market in June 2003. At its peak, MMDS has represented only 1.3% of the MVPD market.
- *Private Cable Operators:* Private cable operators, also known as SMATV operators, use some of the same technology as cable systems, but do not use public rights-of-way, and focus principally on serving subscribers living in MDUs. At year-end 1993, there were about one million subscribers to SMATV services, representing 1.67% of the MVPD market and today, there are a little more than 1.2 million subscribers, representing approximately 1.27% of the MVPD market. Subscribership has declined over the last year, from its peak subscribership in mid-2002, when there were approximately 1.6 million reported subscribers to SMATV services, representing 1.78% of the MVPD market.
- *Broadcast Television:* Broadcast stations and networks, and non-broadcast networks alike, must either produce programming or purchase programming from third-party producers. Broadcast networks and stations also are suppliers of content for distribution by MVPDs. In addition, they supply video programming directly to those television households that are not MVPD subscribers and to television sets in MVPD households that are not connected to

such service. Since the *1994 Report*, the broadcast industry has continued to grow in the number of operating stations (from 1,518 as of November 1993 to 1,726 as of June 2003), adding about 1.3% more stations on average each year over the last ten years. Broadcast stations and networks, like MVPDs and non-broadcast networks, derive revenue from advertising. Advertising revenues averaged an annual six percent increase since the *1994 Report*, but fell dramatically during the general economic recession of 2001, when advertising revenues declined about 12% from the prior year. Audience levels continue to decline as they have for many years. During the 2002-2003 television season, broadcast television stations collectively (network affiliates, independent stations and public broadcast stations) accounted for an average 49 share of prime time viewing for all television households, compared to an average 74 share ten years earlier. During the 2002-2003 television season, broadcast television stations collectively accounted for an average 45 share of all-day viewing for all television households, compared to an average 71 share ten years earlier. Broadcast television stations continue to deploy digital television ("DTV") service. As of September 2003, all but two of the 40 stations that make up the top-four network affiliates in the top ten television markets were broadcasting DTV service. Virtually all of the more than 1,300 commercial television stations have been granted DTV construction permits or licenses and 1,038 are on the air with DTV operation, or nearly 80%.

- *LEC Entry.* LEC involvement into the video market over the last ten years has been lackluster. We previously reported that the largest incumbent LECs have largely exited the video business. This remains true today. The most notable exception is BellSouth, which currently operates overbuild cable systems in 14 franchise areas, passing 1.4 million homes. In addition, a few incumbent LECs offer, or are preparing to offer, MVPD service over existing telephone lines. Qwest Communications International (formerly US West), for example, offers video service in several markets, high-speed Internet access, and telephone service over existing copper telephone lines using very high-speed digital subscriber line ("VDSL"). Currently, BSPs, many of which also operate incidentally as competitive LECs, are the primary OVS certification holders. In fact, over the last ten years, Ameritech (now owned by SBC) made the most significant entry of any incumbent LEC into the video programming distribution market, purchasing and building facilities-based services such that by 1998, it held 111 cable franchises with the potential to pass more than 1.7 million homes, and had nearly 250,000 subscribers. But Ameritech (SBC) eventually sold all of its interests in video program distribution systems, and no longer remains involved in the video business.
- *Internet Video:* In 1994, Internet video was not yet in use. The World Wide Web was a nascent technology. Despite increasing interest in the medium, near broadcast-quality streaming video requires a high-speed broadband connection. As of June 2003, an estimated 59 million Americans subscribed to an Internet access service, and 20 million of those subscribed to a high-speed Internet access service, or about one-third of all subscribers. Nevertheless, real-time and downloadable video accessible over the Internet continues to become more widely available and the amount of content is increasing. Yet, despite the

evidence of increased interest in Internet video deployment and use, the medium is still not seen as a direct competitor to traditional video services. In our *Cable Modem NPRM*, we invited comment on whether the threat that subscriber access to Internet content or services could be blocked or impaired is sufficient to justify some form of regulatory intervention at this time,<sup>15</sup> and whether a finding of such blocking or impairment in the future should trigger regulatory intervention.<sup>16</sup> We are presently reviewing comments on these and other issues as part of that proceeding.

- *Home Video Sales and Rentals:* We consider the sale and rental of home video, including videocassettes, DVDs, and laser discs, part of the video marketplace because they provide services similar to the premium and pay-per-view offerings of MVPDs. In 1994, VCR penetration was 84% of TV households. In 2003, Nielsen Media Research estimates VCR penetration at 91% of TV households. Our 1998 *Report* was the first *Report* in which we reported that DVD technology, introduced in 1997, would likely replace laser disc technology as another means to view video programming. The number of homes with DVD players has grown rapidly since their introduction, and DVDs have made significant impact on the home video market. In the first half of 2003 alone, equipment manufacturers sold 10.3 million DVD players. The newest home video technology is the personal video recorder ("PVR"). Introduced in 1999, this device is capable of pausing, recording and rewinding live television in digital form on an internal hard drive instead of videotape. PVRs may be purchased from and subscription obtained through an MVPD or directly from a PVR service operator. Currently, there are approximately 2.1 million PVRs in use, as measured by PVR subscriptions.
- *Electric and Gas Utilities:* In 1994, some utilities were engaged in the provision of video services through overbuilding incumbent cable systems, though such activity was very limited. Section 103 of the Communications Act, enacted as part of the 1996 Act, removed a significant regulatory barrier that had deterred registered public utility holding companies' entry into video markets. Today, many utilities continue to move forward with ventures involving multichannel video programming distribution. Though their services are still not widespread, utilities do, provide competition in scattered localities. Some of their characteristics, such as ownership of fiber optic networks and access to public rights-of-way, make them competitively significant. Some utilities offer telecommunications services on their own, while others partner with broadband service providers, such as Starpower, RCN's joint venture with PEPCO. It also appears that utilities, particularly municipal utilities in rural areas, are willing to build advanced telecommunications networks to offer a full range of services where incumbent cable operators and telephone companies are not. Reports indicate that 105 public power entities offer video services.

<sup>15</sup> See *Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities*, 17 FCC Rcd 4798, 4845 ¶ 87 (2002) ("*Cable Modem NPRM*").

<sup>16</sup> *Id.* at 4846 ¶ 92.

17. We also find that:

- Although cable operators continue to acquire and trade systems, consolidation of the top cable operators appears to have declined slightly over the past year, after many years of rapid consolidation and concentration. For example, the four largest operators served about 51.7% of all U.S. cable subscribers in June 2002, and in June 2003, that number was down to about 50.5% of all U.S. cable subscribers. In terms of one traditional economic measure, national concentration among the top MVPDs has increased since last year as the largest MSOs have grown larger over the past year, and current levels are above levels reported since the *1994 Report*.<sup>17</sup> DBS operators DirecTV and EchoStar rank among the five largest MVPDs in terms of nationwide subscribership along with three cable MSOs. In 1994, DBS was a new technology. As of year-end 2002, slightly more than 51 million of the nation's cable subscribers were served by systems that are included in 109 regional clusters. At year-end 1994, only about 20 million subscribers were served by systems that were included in 97 regional clusters.
- The number of satellite-delivered programming networks has increased significantly over the last ten years. As of year-end 1994, there were approximately 106 non-broadcast programming networks available for carriage by MVPDs. As of June 2003, there were more than 339 national non-broadcast programming networks. During the same period, vertical integration of national programming services between cable operators and programmers has decreased from 53% at year-end 1994 to 33% as of June 2003. As the number of vertically-integrated networks has increased, the total number of networks also has increased such that the percent of vertically-integrated networks has steadily declined (from over 50% in 1994 to 30% in 2002) until this year when the percent rose to 33%. In 2003, four of the top six cable MSOs, ranked by subscribership, held ownership interests in satellite-delivered programming services. In 1994, five of the top six cable MSOs held ownership interests in satellite-delivered programming services. Sports programming warrants special attention because of its widespread appeal and strategic significance for MVPDs. The *2003 Report* identifies at least 84 regional networks, 28 of which are sports channels, many owned at least in part by MSOs. There are also 37 regional and local news networks that compete with local broadcast stations and national cable news networks.
- The program access rules adopted pursuant to the 1992 Cable Act, and recently extended by the Commission, were designed to ensure that other MVPDs can access vertically-integrated satellite delivered programming on non-discriminatory terms. We recognize that the terrestrial distribution of programming, including in particular regional sports programming, remains an

---

<sup>17</sup> Traditional economic measures (e.g., the Herfindahl-Hirschman Index or HHI) are based on market shares or the squaring of market shares such that large companies are weighed more heavily than small companies. The HHI (and apparent levels of concentration) decline with rising equality among any given number of companies in terms of market shares even if these firms individually have larger shares of the markets. See fn. 577 *infra*.

important issue and could have an impact on the ability of alternative MVPDs to compete in the video marketplace.

- In 1994, most technical efforts were focused on the development and use of digital compression and modulation technologies. The cable industry was just beginning to accelerate the upgrade of its wired networks to increase capacity and enhance the capabilities of their transmission platforms to include such advanced services as voice, data transport (later known as Internet access services), and advanced video services such as video-on-demand ("VOD"). Today, many advanced services are available to subscribers, but many more are still evolving. Digital compression technology is now in widespread use by cable and non-cable MVPDs, as are many of the services operating on these platforms such as telephony and high-speed Internet access services. MVPDs are now focusing on deployment of VOD and other emerging interactive television services.
- There have been numerous significant technical developments regarding cable modems and other technologies used to access a wide range of services offered by MVPDs. At the time of our first *Report* in 1994, the Internet was still a nascent technology. By June 2003, there were approximately 13.4 million cable modem subscribers in the U.S. Although cable modems were not available for residential use at the time of our *1994 Report*, a group of cable operators, joined together in December 1996 to issue a Request for Proposal ("RFP") that resulted in the development of the DOCSIS standard. As of September 2003, 365 DOCSIS modems have received certification and 54 Cable Modem Termination Systems ("CMTSs") have gained qualified status under DOCSIS. In addition, most operators continue to improve their high-speed Internet access service, offering higher speeds and special features. PacketCable, another CableLabs project, began in 1997, and is the standard developed for delivering advanced, real-time multimedia services over two-way cable plant. PacketCable enables a wide range of services, including IP telephony, multimedia conferencing, interactive gaming, and general multimedia applications.
- There also have been numerous significant technical developments regarding the navigation devices used to access a wide range of services offered by MVPDs. In 1998, the Commission adopted rules, pursuant to Section 629 of the Communications Act, so that consumers could obtain "navigation devices" from commercial sources other than their cable providers. In 2003, the Commission further adopted rules to permit television sets to be built with "plug-and-play" functionality for one-way digital cable services, without the need for a set-top box. The cable and consumer electronics industries continue to work on the development of an agreement for two-way "plug-and-play" receivers. The Commission also extended the date for the ban on cable operators provision of integrated set-top boxes from January 1, 2005 until July 1, 2006. In addition, the Commission also adopted rules to assure that DTV broadcast content will not be indiscriminately redistributed. Specifically, content protection will be signaled via the Redistribution Control Descriptor, as set forth in ATSC Standard A/65B, Program and System Information Protocol for Terrestrial Broadcast and Cable. Content marked by the descriptor may only be output or recorded through to

analog outputs, protected digital outputs, and a small class of unprotected digital outputs at a lower resolution. Through the OpenCable project, CableLabs has developed hardware specifications as well as specifications for the software interface that a host device needs to accommodate these changes.

## II. COMPETITORS IN THE MARKET FOR THE DELIVERY OF VIDEO PROGRAMMING

### A. Cable Television Service

18 Ten years ago, cable operators served almost 100% of the nation's MVPD subscribers.<sup>18</sup> Today, most consumers have the additional choice of two national DBS providers, and cable's share of the MVPD market has fallen to approximately 75% of all MVPD subscribers.<sup>19</sup> Competition in the MVPD market has been accompanied by technological innovation and the introduction of new products and services. In 1994, most cable operators offered 30 to 53 analog video channels.<sup>20</sup> Today, after investing tens of billions of dollars to rebuild and upgrade cable systems, cable operators offer, on average, 70 analog video channels, 120 digital video channels, high-definition television programming, video-on-demand, and non-video services such as high-speed Internet access service, and telephone service.

19. This section provides a snapshot of the cable industry five and ten years ago, and addresses the performance of franchised cable system operators during the past year.<sup>21</sup> We address four different areas of performance. First, we report on the general performance of the industry, including subscriber levels, availability of basic services, and viewership. Second, we discuss the cable industry's financial performance, including its revenue, cash flow status, stock valuations, and system transactions. Third, we examine the cable industry's acquisition and disposition of capital, including the amount of funds raised, and how these funds are being used to upgrade physical plant and to acquire new systems. Lastly, we address the growth of advanced broadband services, including high-speed Internet access services, digital video services, video-on-demand, and cable telephony that are offered in conjunction with, and over the same facilities as, video service.

---

<sup>18</sup> NCTA Comments at 2. In the *1994 Report*, the Commission found that "for most households, cable television is the only provider of multichannel video programming." *1994 Report*, 9 FCC Rcd at 7449 ¶ 13.

<sup>19</sup> NCTA Comments at 7.

<sup>20</sup> *1995 Report*, 11 FCC Rcd at 2162, Table 3.

<sup>21</sup> A franchise is an authorization supplied by a federal, state, or local government entity to own or construct a cable system in a specific area. 47 U.S.C. §§ 522(9), 522(10). A cable system operator is "any person or group of persons (A) who provides cable service over a cable system, and directly or through one or more affiliates owns a significant interest in such cable system, or (B) who otherwise controls or is responsible for, through any arrangement, the management and operation of such a cable system." 47 U.S.C. § 522(5).